

CLAIMS:

1. A system comprising:

an interface of a target application, the interface comprising a plurality of operations

to be selected by a user;

5 a monitoring unit configured to monitor data of selecting of the plurality of operations of the interface by the user, and to generate a log of the monitored data, to package the log of the monitored data into different forms of the monitored data using a packaging object derived from an abstract class;

10 a communicating unit configured to receive an object derived from the abstract class including the log of the monitored data, and to communicate the log of the monitored data.

2. A system according to Claim 1, wherein the target application is a software application and the interface is a display screen of the software application.

3. A system according to Claim 1, wherein the target application is an image forming device and the interface is an operation panel of the image forming device.

15 4. A system according to Claim 1, wherein the target application is an appliance and the interface is an operation panel of the appliance.

5. A system according to Claim 1, wherein the communicating unit sends the log of the monitored data when the user exits the target application.

20 6. A system according to Claim 1, further comprising a setting unit configured to set a number of sessions of the target application to be executed by the user prior to the communicating unit communicating the log of the monitored data.

7. A system according to Claim 6, wherein the abstract class includes first and second derived classes, the first derived class storing data of one session and the second derived class

storing data of the set number of sessions.

8. A system according to any one of Claims 1-7, wherein the communicating unit  
communicates the log of the monitored data by Internet mail.

**9. A system comprising:**

5           interface means of a target application means, the interface means for providing a  
plurality of operations to be selected by a user;  
              monitoring means for monitoring data of selecting of the plurality of operations of the  
              interface means by the user, and for generating a log of the monitored data, to package the log  
              of the monitored data into different forms of the monitored data using a packaging object  
10           derived from an abstract class;

              communicating means for receiving an object derived from the abstract class  
              including the log of the monitored data, and for communicating the log of the monitored data.

10           10. A system according to Claim 9, wherein the target application means is a  
              software application and the interface means is a display screen of the software application.

15           11. A system according to Claim 9, wherein the target application means is an image  
              forming device and the interface means is an operation panel of the image forming device.

12. A system according to Claim 9, wherein the target application means is an  
appliance and the interface means is an operation panel of the appliance.

20           13. A system according to Claim 9, wherein the communicating means sends the log  
              of the monitored data when the user exits the target application means.

14. A system according to Claim 9, further comprising a setting means for setting a  
number of sessions of the target application means to be executed by the user prior to the  
communicating means communicating the log of the monitored data.

15. A system according to Claim 14, wherein the abstract class includes first and second derived classes, the first derived class storing data of one session and the second derived class storing data of the set number of sessions.

5        16. A system according to any one of Claims 9-15, wherein the communicating means communicates the log of the monitored data by Internet mail.

17. A method of monitoring usage of an interface of a target application, the interface including a plurality of operations to be selected by a user, comprising the steps of:

monitoring data of selecting of the plurality of operations of the interface by the user;

generating a log of the monitored data, to package the log of the monitored data into

10 different forms of the monitored data using a packaging object derived from an abstract class; and

receiving an object derived from the abstract class including the log of the monitored data, and communicating the log of the monitored data.

15        18. A method according to Claim 17, wherein the target application is a software application and the interface is a display screen of the software application.

19. A method according to Claim 17, wherein the target application is an image forming device and the interface is an operation panel of the image forming device.

20        20. A method according to Claim 17, wherein the target application is an appliance and the interface is an operation panel of the appliance.

20        21. A method according to Claim 17, wherein the communicating step sends the log of the monitored data when the user exits the target application.

22. A method according to Claim 17, further comprising a step of setting a number of sessions of the target application to be executed by the user prior to the communicating device communicating the log of the monitored data.

5 23. A system according to Claim 22, wherein the abstract class includes first and second derived classes, the first derived class storing data of one session and the second derived class storing data of the set number of sessions.

24. A method according to any one of Claims 17-23, wherein the communicating step communicates the log of the monitored data by Internet mail.

10 25. A computer program product comprising:

the computer storage medium and a computer program code mechanism embedded in the computer storage medium for causing a computer to monitor a user's usage of an interface of a target application, the interface comprising a plurality of operations to be selected by a user, comprising:

15 a first computer code device configured to monitor data of selecting of the plurality of operations of the interface by the user, and configured to generate a log of the monitored data, to package the log of the monitored data into different forms of the monitored data using a packaging object derived from an abstract class; and

20 a second computer code device configured to receive an object derived from the abstract class including the log of the monitored data, and to communicate the log of the monitored data.

26. A computer program product according to Claim 25, wherein the target application is a software application and the interface is a display screen of the software application.

27. A computer program product according to Claim 25, wherein the target application is an image forming device and the interface is an operation panel of the image forming device.

5 28. A computer program product according to Claim 25, wherein the target application is an appliance and the interface is an operation panel of the appliance.

29. A computer program product according to Claim 25, wherein the second computer code device is further configured to send the log of the monitored data when the user exits the target application.

10 30. A computer program product according to Claim 25, further comprising a third computer code device configured to set a number of sessions of the target application to be executed by the user prior to the second computer code device communicating the log of the monitored data.

15 31. A computer program product according to Claim 30, wherein the abstract class includes first and second derived classes, the first derived class storing data of one session and the second derived class storing data of the set number of sessions.

32. A computer program product according to any one of Claims 25-31, wherein the second computer code device is further configured to communicate the log of the monitored data by Internet mail.